What is claimed is:

1. A method for displaying an image, comprising the steps of:

(a) producing a polarization inversion pattern in a ferroelectric member in accordance with image information so as to produce a surface charge pattern corresponding to the polarization inversion pattern; and

(b) producing an image contrast in a contrast production member by an influence of the surface charge pattern, where the contrast production member is joined to the ferroelectric member.

2. A method according to claim 1, wherein said polarization inversion pattern is produced by heating said ferroelectric member so as to produce a heat distribution corresponding to the image information in the ferroelectric member.

3. A method according to claim 2, wherein said ferroelectric member is heated by applying infrared light carrying said image information to the ferroelectric member.

4. A method according to claim 3, wherein said infrared light includes three types of infrared light having three different wavelengths and carrying three pieces of image information representing three different color components of said image, respectively,

said infrared light is applied to the ferroelectric member through a wavelength-selective

transparent film,

a plurality of light-to-heat conversion elements of each of three types are periodically arranged in a plurality of first predetermined positions in said wavelength-selective transparent film, and are selectively transparent to one of the three types of infrared light, and

a plurality of color-formation elements of each of three types are periodically arranged in a plurality of second predetermined positions corresponding to said plurality of first predetermined positions in said contrast production member, and form a color for one of said three different color components.

5. A method according to claim 2, wherein said ferroelectric member is heated by applying infrared light carrying said image information to a light-to-heat conversion member which is arranged in close proximity to or in contact with said ferroelectric member, where said light-to-heat conversion member absorbs said infrared light.

6. A method according to claim 5, wherein said infrared light includes three types of infrared light having three different wavelengths and carrying three pieces of image information representing three different color components of said image, respectively,

a plurality of light-to-heat conversion elements of each of three types are periodically arranged in a

plurality of first predetermined positions in said light-to-heat conversion member, selectively absorb one of the three types of infrared light, and convert the one of the three types of infrared light into heat, and

a plurality of color-formation elements of each of three types are periodically arranged in a plurality of second predetermined positions corresponding to said plurality of first predetermined positions in said contrast production member, and form a color for one of said three different color components.

7. A method according to claim 1, wherein in said step (a), a bias voltage is applied to the ferroelectric member through a transparent conductive film which is arranged on one side of the ferromagnetic member.

8. A method according to claim 7, wherein said transparent conductive film includes a plurality of conductive portions and a plurality of non-conductive portions intermingled with the plurality of conductive portions, and the plurality of conductive portions and the plurality of non-conductive portions are small in size.

9. A method according to claim 8, wherein said plurality of conductive portions and said plurality of non-conductive portions are alternately arranged at predetermined intervals.

10. A method according to claim 7, wherein said transparent conductive film is transparent to infrared

light.

11. A method according to claim 5, wherein said light-to-heat conversion member includes a plurality of light-to-heat conversion portions and a plurality of non-conversion portions intermingled with the plurality of small light-to-heat conversion portions, and the plurality of light-to-heat conversion portions and the plurality of non-conversion portions are small in size.

12. A method according to claim 11, wherein said plurality of light-to-heat conversion portions and said plurality of non-conversion portions are alternately arranged at predetermined intervals.

13. A method according to claim 1, wherein said contrast production member is constituted by a base in which charged particles are dispersed.

14. A method according to claim 1, wherein said contrast production member is made of an electrochromic material.

15. A method according to claim 1, wherein said ferroelectric member is made of an inorganic ferroelectric oxide.

16. A method according to claim 15, wherein said ferroelectric member has a form of a thin film, and said inorganic ferroelectric oxide is made from metal alkoxides.

17. A method according to claim 15, wherein said inorganic ferroelectric oxide is $LiNb_xTa_{1-x}O_3$, where $0 \leq x \leq 1$.

18. A method according to claim 3, wherein said ferroelectric member is doped with a dopant which absorbs said infrared light.

19. A method according to claim 18, wherein said dopant contains at least one of Mg, Ti, Cr, Ni, Cu, Zn, Zr, Nb, Mo, Rh, Ag, In, Sn, Au, and Pb.

20. An apparatus for displaying an image, comprising:

a ferroelectric member in which a polarization inversion pattern is produced in accordance with image information so as to produce a surface charge pattern corresponding to the polarization inversion pattern; and

a contrast production member which is joined to said ferroelectric member, and in which an image contrast is produced by an influence of the surface charge pattern.

21. An apparatus according to claim 20, wherein said polarization inversion pattern is produced by heating said ferroelectric member so as to produce a heat distribution corresponding to the image information in the ferroelectric member.

22. An apparatus according to claim 21, wherein said ferroelectric member is heated by applying infrared light carrying said image information to the ferroelectric member.

23. An apparatus according to claim 22, further comprising a wavelength-selective transparent film,

wherein said infrared light includes three types of infrared light having three different wavelengths and

carrying three pieces of image information representing three different color components of said image, respectively,

said infrared light is applied to the ferroelectric member through said wavelength-selective transparent film,

a plurality of light-to-heat conversion elements of each of three types are periodically arranged in a plurality of first predetermined positions in said wavelength-selective transparent film, and are selectively transparent to one of the three types of infrared light, and

a plurality of color-formation elements of each of three types are periodically arranged in a plurality of second predetermined positions corresponding to said plurality of first predetermined positions in said contrast production member, and form a color for one of said three different color components.

24. An apparatus according to claim 21, further comprising,

a light-to-heat conversion member which is arranged in close proximity to or in contact with said ferroelectric member, absorbs said infrared light, and converts the infrared light into heat, and

a light application unit which applies said infrared light to said light-to-heat conversion member.

25. An apparatus according to claim 24, wherein said infrared light includes three types of infrared light having three different wavelengths and carrying three pieces of image information representing three different color components of said image, respectively,

a plurality of light-to-heat conversion elements of each of three types are periodically arranged in a plurality of first predetermined positions in said light-to-heat conversion member, selectively absorb one of the three types of infrared light, and convert the one of the three types of infrared light into heat, and

a plurality of color-formation elements of each of three types are periodically arranged in a plurality of second predetermined positions corresponding to said plurality of first predetermined positions in said contrast production member, and form a color for one of said three different color components.

26. An apparatus according to claim 20, further comprising,

a transparent conductive film which is arranged on one side of the ferromagnetic member, and

a bias-voltage application unit which applies a bias voltage to the ferroelectric member through the transparent conductive film.

27. An apparatus according to claim 26, wherein said transparent conductive film includes a plurality of

conductive portions and a plurality of non-conductive portions intermingled with the plurality of conductive portions, and the plurality of conductive portions and the plurality of non-conductive portions are small in size.

28. An apparatus according to claim 27, wherein said plurality of conductive portions and said plurality of non-conductive portions are alternately arranged at predetermined intervals.

29. An apparatus according to claim 26, wherein said transparent conductive film is transparent to infrared light.

30. An apparatus according to claim 24, wherein said light-to-heat conversion member includes a plurality of light-to-heat conversion portions and a plurality of non-conversion portions intermingled with the plurality of small light-to-heat conversion portions, and the plurality of light-to-heat conversion portions and the plurality of non-conversion portions are small in size.

31. An apparatus according to claim 30, wherein said plurality of light-to-heat conversion portions and said plurality of non-conversion portions are alternately arranged at predetermined intervals.

32. An apparatus according to claim 20, wherein said contrast production member is constituted by a base in which charged particles are dispersed.

33. An apparatus according to claim 20, wherein said

contrast production member is made of an electrochromic material.

34. An apparatus according to claim 20, wherein said ferroelectric member is made of an inorganic ferroelectric oxide.

35. An apparatus according to claim 34, wherein said ferroelectric member has a form of a thin film, and said inorganic ferroelectric oxide is made from metal alkoxides.

36. An apparatus according to claim 34, wherein said inorganic ferroelectric oxide is $LiNb_xTa_{1-x}O_3$, where $0 \leq x \leq 1$.

37. An apparatus according to claim 22, wherein said ferroelectric member is doped with a dopant which absorbs said infrared light.

38. An apparatus according to claim 37, wherein said dopant contains at least one of Mg, Ti, Cr, Ni, Cu, Zn, Zr, Nb, Mo, Rh, Ag, In, Sn, Au, and Pb.

39. An image display medium for use in displaying an image, comprising:

a ferroelectric member in which a polarization inversion pattern is produced in accordance with image information so as to produce a surface charge pattern corresponding to the polarization inversion pattern; and

a contrast production member which is joined to said ferroelectric member, and in which an image contrast is produced by an influence of the surface charge pattern.

40. An image display medium according to claim 39,

wherein said ferroelectric member is doped with a dopant which absorbs said infrared light.

41. An image display medium according to claim 40, wherein said dopant contains at least one of Mg, Ti, Cr, Ni, Cu, Zn, Zr, Nb, Mo, Rh, Ag, In, Sn, Au, and Pb.

42. An image display medium according to claim 39, further comprising a light-to-heat conversion member which has a form of a layer, is arranged in close proximity to or in contact with said ferroelectric member, absorbs said infrared light, and converts the infrared light into heat so that the heat is transferred to the ferroelectric member.

43. An image display medium according to claim 42, wherein said light-to-heat conversion member includes a plurality of light-to-heat conversion portions and a plurality of non-conversion portions intermingled with the plurality of small light-to-heat conversion portions, and the plurality of light-to-heat conversion portions and the plurality of non-conversion portions are small in size.

44. An image display medium according to claim 43, wherein said plurality of light-to-heat conversion portions and said plurality of non-conversion portions are alternately arranged at predetermined intervals.

45. An image display medium according to claim 39, wherein said ferroelectric member is made of an inorganic ferroelectric oxide.

46. An image display medium according to claim 45,

wherein said ferroelectric member has a form of a thin film, and said inorganic ferroelectric oxide is made from metal alkoxides.

47. An image display medium according to claim 45, wherein said inorganic ferroelectric oxide is $LiNb_xTa_{1-x}O_3$, where $0 \leq x \leq 1$.

48. An image display medium according to claim 39, further comprising a transparent conductive film which is arranged on one side of the ferromagnetic member.

49. An image display medium according to claim 48, wherein said transparent conductive film includes a plurality of conductive portions and a plurality of non-conductive portions intermingled with the plurality of conductive portions, and the plurality of conductive portions and the plurality of non-conductive portions are small in size.

50. An image display medium according to claim 49, wherein said plurality of conductive portions and said plurality of non-conductive portions are alternately arranged at predetermined intervals.

51. An image display medium according to claim 48, wherein said transparent conductive film is transparent to infrared light.

52. An image display medium according to claim 39, wherein said contrast production member is constituted by a base in which charged particles are dispersed.

53. An image display medium according to claim 39, wherein said contrast production member is made of an electrochromic material.

54. An image display medium according to claim 39, further comprising a wavelength-selective transparent film,

wherein said image is constituted by three different color components,

a plurality of light-to-heat conversion elements of each of three types are periodically arranged in a plurality of first predetermined positions in said wavelength-selective transparent film, and are selectively transparent to one of three types of infrared light respectively having three different wavelengths, and

a plurality of color-formation elements of each of three types are periodically arranged in a plurality of second predetermined positions corresponding to said plurality of first predetermined positions in said contrast production member, and form a color for one of said three different color components.

55. An image display medium according to claim 42, wherein said image is constituted by three different color components,

a plurality of light-to-heat conversion elements of each of three types are periodically arranged in a plurality of first predetermined positions in said light-to-heat conversion member, and selectively absorb one of

three types of infrared light, and convert the one of the three types of infrared light into heat, and

a plurality of color-formation elements of each of three types are periodically arranged in a plurality of second predetermined positions corresponding to said plurality of first predetermined positions in said contrast production member, and form a color for one of said three different color components.

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